SARI

Daerah penelitian Siluk terletak di daerah Kabupaten Pinrang, Provinsi Sulawesi Selatan, dengan koordinat WGS 84 garis Bujur Timur: 119° 29' 05.11" dan Lintang Selatan: 03° 20' 54" selatan katulistiwa. Geologi di daerah Siluk didominasi oleh batuan vulkanik Neogen (*M - L Miocene,* Bergman 1996), batuan lapisan sedimen laut yang kadang kadang *beroverprint* dengan sedimen vulkanik dan vulkanik breksi. Batuan sedimen tersebut tersingkap di sepanjang jalan utama khususnya di sebelah selatan daerah penelitian Siluk. Tebal lapisan sedimen antara 1 hingga 10 m dengan orientasi *strike* umumnya 300 - 340° / 50° *SE*. Lalu di bagian tengah dan barat laut dengan singkapan batuan intrusi, yaitu *diorite - microdiorite* di Buttu Bando dan Buttu Sitodo.

Interpretasi struktur di daerah Siluk adalah struktur dengan orientasi *strike NW / SE* dan *N/S*, umumnya paralel dengan struktur utama *Walanae Fault* yang membujur di sebelah timur. Dikoleksi 9 conto *rockchip* untuk dianalisa geokimia dengan metoda *fire assay* untuk unsur Au, Ag, Cu, Pb, Zn di laboratorium Intertek Jakarta. Lalu koleksi 26 conto *rockchip* untuk dianalisa komposisi mineral dan alterasi dengan metoda *PIMA* (*Portable Infrared Mineral Analysis*), yang dianalisa di kantor MMG Oxindo Jakarta. Sebanyak 5 conto *rockchip* untuk dianalisa dengan Sayatan tipis (*thin sections)* di laboratorium Petrografi UPN "Veteran" Yogyakarta, dan 4 conto *rockchip* untuk dianalisa *XRD* di laboratorium UGM Yogyakarta.

Hasil analisa *fire assay* tidak signifikan, kadar unsur Au, Ag, Cu, Pb, Zn berada di bawah *detection limit*. Analisa *PIMA* menunjukkan adanya mineral *clay* seperti m*ontmorillonite, kaolinite,* dan dominasi *illite, halloysite*, kalsit. Hasil analisa sayatan tipis (*thin sections*) mengindikasikan keberadaan urat kuarsa / urat kalsit di Ratte Tallang, dan batuan beku yang teralterasi kuat di Salu Asan, Salu Kanan dan Buttu Bando. Hasil analisa *XRD* menunjukkan keberadaan mineral primer *plagioclase (>50%)* di singkapan intrusi Buttu Bando, mineral *clay* seperti *illite, halloysite, smectite* dan dominan mineral kuarsa di zona Batusia dan Salu Asan. Keberadaan mineral pirit merupakan produk mineral *diagenetic* pada proses sedimentasi dan juga pirit ini terjadi sehubungan dengan aktivitas sesar / struktur.

Diinterpretasikan juga bahwa intrusi di Buttu Bando merupakan pusat intrusi dan kemungkinan mempunyai hubungan dengan intrusi di Buttu Sitodo sebagai satu *batholith / stock body*.

Alterasi didominasi oleh argilik dengan hadirnya mineral *silica-claypyrite, illite* dan *halloysite.* Diantaranya, diinterpretasikan sebagai akibat proses pelapukan batuan beku / vulkanik (*hydrolysis process*) atau proses hidrotermal. Alterasi propilitik diindikasikan dengan hadirnya mineral klorit dan *calcitecarbonate veins*. Sistem mineralisasi adalah kemungkinan kombinasi dari *low sulfidation quartz-carbonate veining*, dan lebih *sulphidic* pada *veining* lebih dalam yang berhubungan dengan sistem porfiri intrusi *diorite-microdiorite* di Buttu Bando dan Buttu Sitodo. Intrusi tersebut tidak membawa mineralisasi.

ABSTRACT
The Siluk area is located in Kabupaten Pinrang, South Sulawesi Province, with centre coordinates (WGS 84) Longitude: 119° 29' 05.11" E and Latitude: 03° 20' 54" S. Geology in the Siluk area is mainly dominated by Neogene volcanic - volcaniclastic (M-L Miocene, Bergman 1996). Locally, well-bedded marine sediments are observed. This is interbedded with volcaniclastic and volcanic breccia. The marine sediments exposure along recent road-cuts at southern study area. Thicknesses vary between 1 to 10m with strike and dip orientation generally 300 - 340° / 50° SE. About the centre and to the northwest of the study area there are intrusive outcrops at Buttu Bando and Buttu Sitodo. Interpreted structures in the area are NW / SE and N/S running relatively parallel to the main Walane fault on the East. In total 9 rock samples were collected for fire assay method and submitted to Intertek laboratory in Jakarta to be analyzed for Au, Ag, Cu, Pb, Zn elements. For PIMA (Portable infrared Mineral analysis) method, 26 rockchip samples collected and analyzed for mineral composition and alteration at MMG Oxindo Jakarta. Five rockchip samples for thin sections analysis method were submitted to the Petrography laboratory division of UPN "Veteran" Yogyakarta. Four rockchip samples for XRD analysis method were also sent to Petrography laboratory of UGM, Yogyakarta.
Results: no significant result were returned from these fire assays. PIMA results indicated clay minerals such as montmorillonite, calcite, kaolinite and dominantly illite and halloysite. Thin sections indicated the presence of quartz / calcite veining at Ratte Tallang, and strongly altered / weathered intrusive rocks at Salu Asan, Salu Kanan and Buttu Bando. The XRD analysis showned a primary mineral such as plagioclase (>50%) at Buttu Bando intrusive outcrop, and dominantly quartz, clay minerals such as illite, halloysite, smectite over Batusia and Salu Asan areas. Pyrite occurs as a diagenetic mineral in the sediments, and also occurs related to fault structures. It is therefore concluded that Buttu Bando is an intrusive centre and probably has a connection to the Buttu Sitodo intrusive interpreted as a batholith / stock body.
The alteration is predominantly argillic as indicated by the presence of silica-clay-pyrite, illite, halloysite minerals. Some of this is interpreted due to the supergene weathering process of the intrusive / volcanic (hydrolysis process) or hydrothermal process. Propylitic alteration is indicated by the presence of chlorite minerals, calcite-carbonate veins.
Mineralization is possibly a combination of low sulfidation quartzcarbonate veining and more sulphidic deeper veins related to a porphyry system with diorite - microdiorite instrusives at Buttu Bando and Buttu Sitodo. This is a weakly mineralized instrusives.